Induced Hypothermia

Inclusion Criteria/Screening Utilization:

- Non-traumatic cardiac arrest with return of spontaneous circulation (ROSC).
- Patient age >12 or >55 kg.
- Comatose after ROSC: GCS <8 AND no purposeful movement.
- Core body temperature is > 34°C.
- Intubated with ETCO₂ > 20.
- Pregnant female with obviously gravid uterus. (Contact OLMC)

Exclusion Criteria (any of the following):

- Uncontrolled GI Bleeding
- Conflict with Do Not Resuscitate (DNR) order.
- Major intracranial, intrathoracic, or intraabdominal surgery within last 14 days.
- Sepsis as suspected cause of cardiac arrest.
- Cardiovascular instability as evidenced by: uncontrollable arrhythmias, refractory hypotension.

Procedure:

- 1. Perform Neuro exam: Pupils (size, reactivity, equality), Motor response to pain.
- 2. Ensure accepting transport destination and MD.
- 3. Expose patient. Apply ice packs to axilla & groin.
- 4. Administer Versed 0.15 mg/kg to max of 10 mg.
- 5. Administer Norcuron 0.1 mg/kg to max of 10 mg.
- 6. Attempt second IV (large bore) if not already in place.
- 7. Begin cold saline bolus 30 mL/kg to max of 2 liters.
- 8. Administer Dopamine 10-20 mcg/kg/min for MAP 90-100.
- 9. If there is loss of ROSC after cooling is initiated, revert to appropriate protocol and contact medical control as soon as feasible.

Pearls:

- If patient meets other criteria for induced hypothermia and is not intubated, then intubate according to protocol before inducing cooling. If unable to intubate <u>DO NOT</u> initiate induced hypothermia.
- When exposing patient for purpose of cooling, undergarments may be left in place. Be mindful of the environment and take steps to preserve the patients modesty.
- Do not delay transport for the purpose of cooling.
- Reassess airway frequently and with every patient move.
- Patients develop metabolic alkalosis with cooling. Do not hyperventilate.
- Continue to address specific differentials associated with the original dysrhythmia.